

Munitions Response Program Marine Corps Air Station Cherry Point

Former Cat Island Bomb Target (BT-2)

July 2008

Marine Corps Air Station (MCAS) Cherry Point is in the process of investigating several former munitions training ranges. This fact sheet describes one of these sites—the former Cat Island Bomb Target (BT-2)—and the process that is used to set priorities for cleaning up the munitions left behind by training operations in the 1940s—1950s.

The Naval Facilities Engineering Command Mid-Atlantic is leading the investigation, working in partnership with MCAS Cherry Point, the U.S. Environmental Protection Agency, and the North Carolina Department of Environment and Natural Resources.

The partnering team invites you to be a part of the decision-making process as we rank the site, using the relative risk criteria described in this fact sheet, develop the work plan for the initial munitions investigation, and use the results of that investigation in planning the next steps.

Munitions Investigation Begins

MCAS Cherry Point is a military installation near Havelock, in Craven County, North Carolina. The Air Station provides training and support for the Atlantic Fleet Marine Force aviation units and also serves as a primary aviation supply point.

Since MCAS Cherry Point was commissioned in 1942, various areas on the Air Station have been used for munitions training. Two of these, which are no longer being used, are now being investigated as munitions response sites:

- The former Cat Island Bomb Target (BT-2) in Bogue Sound (described in this fact sheet)
- Former Skeet and Trap Range No. 1 on the Air Station (to be investigated and addressed separately)

Former Cat Island Bomb Target (BT-2)

The site under investigation centers on a low-lying, marshy island of approximately 10 acres, about 1/3 mile long and very narrow, less than 300 feet at its widest point. It is located

in Bogue Sound, about 1/2 mile inshore of Emerald Isle. The Navy's historical documents refer to the former bomb target as Cat Island, but more recent maps and local residents identify it as Wood Island.



Cat Island Bomb Target (BT-2) encompassed the island known as Wood Island

The "Cat Island" now shown on some maps is a small, partially submerged shoal, less than a mile southwest of Wood Island. It is mostly under water, even at low tide.

The former Cat Island Bomb Target (BT-2) consisted of three locations on and around Wood Island. These areas will be investigated along with the associated surface danger zone in Bogue Sound.

A surface danger zone is a designated area of ground (or water) and airspace within a training range. It is the area that could contain projectiles, fragments, and components from firing, launching, or detonating weapons and explosives.

From 1943 until 1952, Cat Island Bomb Target (BT-2) was used for bombing practice, using inert target practice munitions. From 1952 through 1955, aerial training involved the use of live munitions. Aerial training ceased in 1955, due to nearby residences. Although it is still officially identified as an aircraft rocket range, the site has not been used as a target since then.

Munitions Hazards on Wood Island

Although Wood Island is no longer used by the Air Station as a target, the Department of Defense (DoD) still owns it. Munitions hazards make it unsafe for any kind of civilian use. The Marines periodically removed munitions from the surface while the bomb targets were still in use. Around 1957, attempts were made to clean up munitions on the island, but the technology at that time was not capable of thoroughly clearing the island. Over time, old munitions that had been underwater have washed up on the shoreline.

As this photo shows, munitions and debris can be seen along Wood Island's shoreline. Although the munitions appear to be corroded, they may still be dangerous. "No Trespassing" signs are posted, but there are no physical barriers to keep people off the island. Many people fish and enjoy recreational activities nearby. Local fishermen and long-time residents are well aware of the island's history, but vacationers and newer residents may not be.



Munitions debris along the shoreline

The Navy/Marine Corps will evaluate the extent of munitions and contaminants remaining from former training activities. This information will help determine the most appropriate actions needed to ensure safety and to protect human health and the environment.

First Step is a Site Inspection

A Munitions Site Investigation follows the same basic steps as an investigation of environmental sites under the national "Superfund" program. It begins with a Preliminary Assessment and Site Inspection, which sets the stage for further action. Data is gathered and evaluated to determine if immediate action or more detailed investigation is needed, or if all or part of the site can be eliminated from further investigation.

Look, but don't touch!

Looks are deceiving when it comes to munitions, which is what the military calls ammunition like bombs and rockets. Old war souvenirs can be dangerous. Even small items can injure or kill. With age and weather, safety devices may no longer work. Old explosives may become unstable and unusually sensitive. Even if it hasn't been moved for years, or you've moved it dozens of times, it may still explode. Large or small...new or old... shiny or rusty...clean or dirty... All of it can be dangerous!

If you find munitions, contact your local law enforcement

At the former Cat Island Bomb Target (BT-2), the following activities are expected to begin in 2008. We are preparing a Work Plan describing these actions in more detail. We will present the Draft Work Plan at the public meetings, where we will ask for your review and input.

- Conduct a survey of munitions and explosives of concern on and around Wood Island, to better understand the types of munitions that were used on the former bomb target.
- Conduct a field investigation of potential contamination from munitions-related chemicals. Samples may be collected and analyzed from the marshy surface soils on the island, as well as surface water and sediment in Bogue Sound, immediately offshore of the island.
- Perform aerial digital geophysical mapping survey of Wood Island and the shallow areas of Bogue Sound surrounding Wood Island. The data could be used to evaluate historic bombing patterns and to identify areas where future investigation may be needed.

Digital geophysical mapping surveys use magnetometers (scientific instruments that measure the strength or direction of the earth's magnetic field) to locate and create a digital map of "magnetic anomalies" (metal objects submerged under water or buried under the ground) that might be munitions. The instruments can be hand-carried, towed behind a boat, or mounted onto aircraft.

The resulting data are used to select areas for

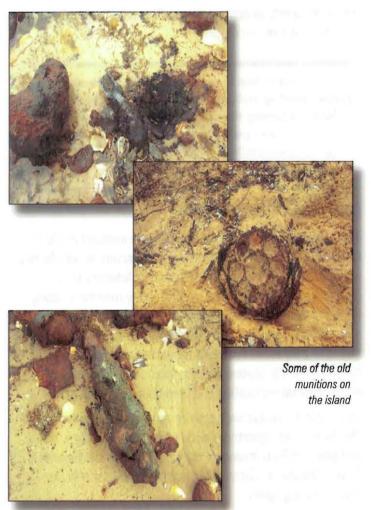
further evaluation.

Possible Future Steps

Depending on the results of the Site Inspection, future phases of the investigation could include the following:

- Taking actions to quickly deal with any current hazard while the investigation continues, such as posting warning signs and working with local officials to educate the public about explosive hazards
- Digging up buried munitions and explosives of concern (an "intrusive investigation") found on the island
- Performing an underwater investigation of the former surface danger zone in Bogue Sound

The timing of future phases of work will depend on the relative priority ranking of the site, in comparison with other Navy/Marine Corps sites.



Munitions Response Program

The Munitions Response Program works to reduce the risks to people and the environment from munitions and explosives of concern. It is part of the Navy/Marine Corps' Environmental Restoration Program. The other part of the Environmental Restoration Program is the Installation Restoration Program, which involves identifying, assessing, and cleaning up the contamination left behind on installations by past handling, storage, and disposal of potentially hazardous wastes.

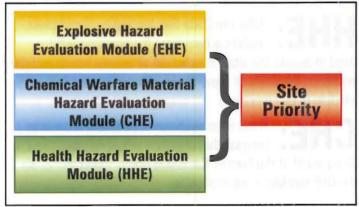
In 2001, the Munitions Response Program was established to more effectively and efficiently investigate the hazards posed by past military munitions-related activities and carry out response actions.

As of September 2006, DoD had identified over 3,300 munitions response sites (including about 240 Navy/Marine sites) that may require response actions under this program. To make the best use of funding, Congress directed DoD to prioritize all munitions response sites, based on the potential risk posed to human health and the environment.

Prioritizing Munitions Response

On October 5, 2005, DoD published the Munitions Response Site Prioritization Protocol as a federal rule (32 Code of Federal Regulations 179).

The Protocol requires installations to set priorities for munitions response sites, based on the overall conditions at each site. The Protocol's central feature is the three hazard evaluation modules shown in this illustration. A site's relative priority is determined by computing the results of one or more of these modules.



Next, the site must be sequenced for response action, in comparison with other Navy/Marine Corps sites. DoD policy requires that a munitions response site with higher relative risks is dealt with before a site with lower relative risks.

Public Participation

The Protocol also requires installations to ask stakeholders, including community members, for their input in developing relative priorities and for their comments on sequencing decisions. Stakeholders include federal agencies, state and local regulatory agencies, tribal governments, landowners directly involved in the Protocol's application to a site, and interested community members who live or work near the site.

The most important factor is the site's relative risk, but other factors can influence sequencing decisions. This is where stakeholder involvement is especially valuable. Other factors can include the following:

- Cultural and social factors
- · Economic factors
- · Reasonably anticipated future land use
- The availability of appropriate technology
- Short-term and long-term ecological effects
- Other environmental impacts

Involving stakeholders in applying the Protocol gives stakeholders a better understanding of the process and helps installations protect human health and the environment.

Ranking the Former Cat Island Bomb Target (BT-2)

The Former Cat Island Bomb Target (BT-2) was initially ranked in October 2007, using the Explosive Hazard Evaluation Module. The site was ranked a priority level 2 out of a possible 8, where level 1 is the highest priority.

After the 2008 Site Inspection is complete, analytical data from the sampling will be used to assess the site's relative risk to human health and the environment. This will allow the Health and Hazard Evaluation Module to be completed.

There is no evidence in historical records to suggest that chemical weapons were used or disposed of at the Former Cat Island Bomb Target (BT-2), so the CHE module is not applicable.

The information that went into the initial prioritization (ranking) of the site will be presented to community members for their input at the August 18 and 19, 2008 public meetings.

It will be presented again after the Site Inspection Report has been prepared and the Health Hazard Evaluation Module has been completed.

The site's ranking will be updated annually, as more information becomes available and progress is made.

Public Open House

MCAS Cherry Point will hold two public open house meetings on August 18 and 19, 2008, where you can learn more about the Cat Island Bomb Target (BT-2) site, how the munitions response process works, the Draft Work Plan for the Site Inspection, and the technologies available for investigating munitions.

If you are interested in participating in the prioritization and sequencing process, please attend one of these meetings to share your views and discuss any concerns with us. Any relevant information that community members can provide will be included, as appropriate, in the next annual update of the site's relative risk ranking.

If you would like to receive future fact sheets and public meeting notices, please sign up for the mailing list by returning the enclosed postage-paid sheet.

Or, if you prefer, e-mail your address to: janice.nielsen@navy.mil. Please put "Cat Island Mailing List" in the Subject line.

Restoration Advisory Board

The best way to learn about and become involved in MCAS Cherry Point's munitions response and environmental cleanup is to attend meetings of the Restoration Advisory Board (RAB). The RAB is made up of community members, along with representatives of regulatory agencies, the Air Station, and the Naval Facilities Engineering Command Mid-Atlantic. The RAB acts as a focal point for exchanging information between the Air Station and the local community about environmental restoration and munitions response activities.

The public is always welcome to attend RAB meetings. The RAB meets quarterly in Havelock, NC. The date, time, and place of RAB meetings are advertised in the *Havelock News, Windsock, Carteret County News Times*, and *Sun Journal newspapers*.



Munitions Response Program

Marine Corps Air Station Cherry Point Former Cat Island Bomb Target (BT-2)



	Do you have comments or questions? Please fill out this sheet and mail it back to us.		
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Would you like your name added to our mailing list?	□ YES	□ N0
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Email or fax (optional):		
Telephone (optional) :		
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If you would like to receive future fact sheets and public meeting notices, please mail this sheet back to us, or send an email with your contact information to janice.neilsen@navy.mil.

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Where can I find more information?

Online at: http://public.lantops-ir.org/sites/public/cherrypoint

The Administrative Record for MCAS Cherry Point's Environmental Restoration Program is maintained on a computer at:

Havelock-Craven County Public Library

301 Cunningham Boulevard Havelock, NC 28532 Phone: (252) 447-7500

For your convenience, selected Munitions Response Program documents will be placed in:

Western Carteret Public Library

230 Taylor Notion Road Cape Carteret, NC 28584 Phone: (252) 393-6500 For munitions and environmental restoration questions, please contact:

Ms. Janice Nielsen

Naval Facilities Engineering Command Mid-Atlantic

Code OPNCEV

9742 Maryland Avenue

Norfolk, VA 23511-3095

Phone: (757) 322-8339

Fax: (757) 322-4805

Email: janice.nielsen@navy.mil

Additionally, you may direct questions locally to:

Dale McFarland

MCAS Cherry Point Environmental Affairs Department

Phone: (252) 466-4598

Email: dale.mcfarland@usmc.mil



Wood Island, site of the former Cat Island Bomb Target (BT-2)

What's Inside?

This fact sheet describes the investigation of munitions at the former Cat Island Bomb Target (BT-2) in Bogue Sound, where Marine Corps Air Station Cherry Point conducted training in the 1940s-1950s.

There is also an important safety message inside - please read and share!

You are invited to a Public Meeting

...to learn more about the former Cat Island Bomb Target (BT-2) and how the public can participate in setting priorities and developing strategies for cleaning up the munitions.

When:	August 18, 2008 4:00 PM to 7:00 PM	August 19, 2008 4:00 PM to 7:00 PM
Where:	Emerald Isle Community Center 7506 Emerald Drive Emerald Isle, NC 28594	Croatan High School Cafeteria 3355 Highway 24 Newport, NC 28570

The meeting locations are accessible to people with disabilities. If you need special accommodations or would like additional information about the meeting, please contact



What: These meetings will be open houses, with poster stations describing the site and the key elements of the Munitions Response Program. The same information will be presented at both meetings. You can drop in at your convenience,

get the information that interests you, and stay only as long as you want to. Knowledgeable personnel will be available at each poster station to answer your questions, provide any additional information you may need, and listen to your views.

Why: Through this forum, it is our hope to identify community concerns, to establish methods for sharing information to address those concerns, and to build and maintain a two-way exchange of communications with all stakeholders in this project.

CH2M HILL, Inc.

Attn: MCAS Cherry Point Team 5700 Cleveland Street Suite 101 Virginia Beach, VA 23462

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